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**SURVEYS AND INVESTIGATIONS PROJECTS**  
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**FEDERAL AID IN WILDLIFE RESTORATION ACT**

**Federal Aid Project No. W-112-R-6**

**Study I: Surveys of Hunters/Trappers Via Mail-Letter Questionnaire**

**Job No. 2: Illinois Furbearer Trapping Survey, 1996-97**

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**Division of Wildlife Resources**



## JOB COMPLETION REPORT

### WILDLIFE HARVEST AND HUNTER OPINION SURVEYS

#### STATE OF ILLINOIS

PROJECT NO.: W-112-R-6

STUDY 1: Surveys of Hunters/Trappers Via Mail-Letter Questionnaire

JOB NO. 2: Illinois Furbearer Trapping Survey, 1996-97

**ABSTRACT:** A systematic sample of 900 persons who purchased a 1996 Illinois resident trapping license was surveyed after the furbearer trapping season. The licensees were contacted by first class mail in three mailings. Questionnaires were delivered to 869 (96.6%) recipients, from which 659 useable replies were received (75.8% response). Of these, 559 (84.8%) were active trappers--i.e., set  $\geq 1$  traps during the season. Only 8 (1.4%) of the active trappers were ineffective--i.e., caught nothing.

The 1996-97 survey covered 11 furbearer species. Badger became legal game for trapping beginning with the 1996-97 season. Findings are presented: (1) on a statewide basis, (2) for each of the 10 wildlife management units in the state, and (3) for the two furbearer management zones currently in use. Data include estimated number and density of effective trappers, estimated number and density of trapper harvest, and average season catch. Statewide estimates for the number of effective trappers (and their catch) were: muskrat (Ondatra zibethicus) 2,078 (61,119), mink (Mustela vison) 1,468 (5,648), raccoon (Procyon lotor) 3,063 (117,556), opossum (Didelphis virginiana) 2,124 (29,500), red fox (Vulpes vulpes) 518 (1,468), gray fox (Urocyon cinereoargenteus) 115 (213), beaver (Castor canadensis) 1,393 (11,180), striped skunk (Mephitis mephitis) 725 (2,539), weasel (Mustela frenata and M. nivalis) 17 (17), coyote (Canis latrans) 622 (3,903), badger (Taxidea taxus) 52 (58), and all species combined 3,172 (233,201). There were an estimated 3,218 active trappers in 1996-97.

Active trappers had traps set for an average of 32.3 days (or nights) and used an average of 31.1 traps during the 1996-97 season. Two-thirds (65.7%) of the effective muskrat trappers caught  $\leq 20$  muskrats. An estimated 38.0% of the effective raccoon trappers caught 1-15 raccoons and 56.4% caught  $\leq 25$ . Furbearers, primarily raccoons, were hunted by 30.5% of the licensed trappers. The harvest of furbearers by hunting trappers was equivalent to 13.2% of the trapped catch. The vast majority of the mink caught were taken in standard foothold/leghold traps (55.3%) or body-gripping (Conibear) traps (44.1%). Most of the mink caught with foothold/leghold traps were taken in "water sets made specifically for mink" (38.7%) or "water sets made for multiple species (not just mink)" (43.4%). Seventy trappers reported seeing river otter (Lutra canadensis) or sign in 36 counties, and 62 trappers reported seeing bobcat (Felis rufus) or sign in 35 counties, during the past 3 years. A plurality (42.2%) of the active trappers thought the raccoon population had increased from 1995-96 to 1996-97, whereas 50.6% of them believed the muskrat population had decreased.

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## JOB COMPLETION REPORT

### SURVEYS AND INVESTIGATIONS PROGRAM

#### STATE OF ILLINOIS

PROJECT NO.: W-112-R-6

STUDY 101: Wildlife Harvest and Hunter Opinion Surveys

JOB NO. 101.2: Illinois Furbearer Trapping Survey, 1996-97

OBJECTIVE: To survey furbearer (11 species of mammals) trappers to determine their activities, harvests, characteristics, attitudes, and opinions in Illinois.

PROCEDURES: A stratified random sample of individuals who purchased 1996 trapping licenses was surveyed via mail-questionnaire. Name/address cards of license purchasers were filled out by vendors for the first license sold in each book of five resident trapping licenses in the 1996 series (total sales estimated at 3,794 - 1 October 1997) (Fig. 1). At the same time, the person purchasing the license was provided with an information card which requested him/her to keep a record of his trapping activities (Fig. 2). The name/address cards were returned to the Division of Wildlife Resources via business reply mail and were filed according to the licensee's county of residence. The sample was drawn from these cards. For some strata, it was necessary to supplement the mailing list with names/addresses from the stubs of trapping licenses sold during the current year.

The stratified random sample was based on the distribution of the 1986-1990 trapping license sales. The size of the sample was set at 900 because this quantity would result in 600 to 700 useable replies (about 17% of all licensed trappers) and insure statistically reliable results at the statewide level.

The questionnaire (Fig. 3), a letter of explanation (Fig. 4), and a return envelope (pre-addressed and postage-paid) were mailed to the individuals on the mailing list. Non-respondents were sent 2nd and 3rd copies of the questionnaire, and accompanying letters (Figs. 5 and 6) at approximately monthly intervals. First class postage was used for all mailings.

Data from returned questionnaires were transferred to a computer file (Ashton-Tate dBASE III+) and analyzed using a computer program designed for the survey. Respondents were placed into one of two categories: inactive - those who did not set any traps for furbearers, or active - those who did set  $\geq 1$  traps for furbearers. Active trappers were further classified as: effective - those who caught  $\geq 1$  furbearers of the species in question, or ineffective - those who did not catch any furbearers.

Data for each species surveyed were compiled for the 10 wildlife management units in Illinois (Fig. 7). In addition, confidence limits at the 95% level were calculated by species for the number of effective trappers, average season catch, and total trapper harvest on a statewide basis. The formulas used were described by Cochran (1953) and Snedecor and Cochran (1967). These are as follows:

- a. Number of effective trappers for species:

$$\pm 2N \sqrt{\frac{pq}{n}}$$

where N = total license sales

n = number of licensees in sample

p = portion of licensees in sample who effectively trapped species in question

q = 1-p

- b. Average season catch per effective trapper for species in question:

$$\pm 1.96 \frac{s}{\sqrt{n_1}}$$

where s = standard deviation of average catch per effective trapper

$n_1$  = number of licensees in sample who effectively trapped species in question

- c. Total trapper harvest:

$$\pm 2N \times \frac{s}{\sqrt{n}}$$



All calculations assumed there were no differences between the activities of the licensees who returned the questionnaire and those who did not.

## FINDINGS AND ANALYSIS:

### 1996-97 Trapping Seasons

The 1996-97 fur-bearing mammal trapping seasons varied from 67 to 147 days in length (Table 1). The seasons for all species except beaver lasted 67 days in both the northern and southern management zones (Fig. 7). In the northern zone, opening dates were 5 November for muskrat, mink, raccoon, opossum, beaver, striped skunk, and weasel, and 10 November for red fox, gray fox, coyote, and badger. In the southern zone, opening dates were 10 November for all 11 species. Beaver trapping season was 142 or 147 days in length, depending on zone. Special regulations reduced the length of the beaver season to 67 days along the Mississippi River from Interstate 80 north to the JoDaviess County line as a protective measure for river otter. No bag limits were in effect for any furbearer.

To provide historical perspective, we emphasize that badgers were reinstated as legal game for trapping in Illinois beginning with the 1996-97 season.

### 1996-97 Trapper Mail Survey

The initial mailing of 900 questionnaires was made on 17 March 1997. The two follow-up mailings to non-respondents were made on 23 April and 28 May, respectively, and the mailings were closed out on 17 July 1997.

A total of 869 (96.56%) licensees in the 1996-97 survey sample was reached by the Postal Service. The 31 remaining questionnaires were returned as undeliverable. There were 659 useable replies received from the licensees contacted, representing a 75.83% response for the number delivered. Of these respondents, 559 (84.83%) reported that they set  $\geq 1$  traps for furbearers during the season and were classified as active. A total of 551 (98.57%) active trappers were effective--i.e. caught  $\geq 1$  furbearers, and the remaining 8 (1.43%) were ineffective--i.e. caught nothing. Based on these data, there were an estimated 3,218 active trappers and 3,172 effective trappers in Illinois in 1996-97.

#### A. Number of Days of Trapping

Active trappers had traps set for an average of 32.3 days (or nights) during the 1996-97 season (Fig. 8). The maximum number of days a trapper could have legally trapped was 147. However, only 22.6% of the respondents stated they had traps set

for >45 days, and 38.4% trapped >30 days. The vast majority of trapping activity is concentrated during the initial 15 to 30 days of the muskrat, mink, and raccoon seasons. In comparison, Illinois trappers had traps set for an average of 23.0 days in 1985-86 (108-day season), 20.9 days in 1990-91 (139-day season), 30.4 days in 1993-94 (147 days), 28.4 days (147-day season) in 1994-95, and 30.7 days in 1995-96 (Hubert 1986; Anderson and Campbell 1992; Anderson et al. 1995, 1996, and 1997).

#### B. Number of Traps Set

The average active trapper used 31.1 traps during the 1996-97 season (Fig. 9). In spite of the fact that there were no restrictions on the number of traps that could be set, 89.4% of all active trappers employed  $\leq 50$  traps. Only 3.8% used >100 traps. In comparison, the average Illinois trapper used 31.2 traps in 1987-88, 31.6 traps in 1990-91, 30.9 traps in 1993-94, 30.8 traps in 1994-95, and 30.1 traps in 1995-96 (Hubert 1988; Anderson and Campbell 1992; Anderson et al. 1995, 1996, and 1997). The average Missouri trapper used 32.9 traps in 1972-73 (Sampson 1973).

#### C. Fur Harvest Summary

A statewide summary for the 11 species of furbearers surveyed in 1996-97 is presented in Table 2. The data for each species include the estimated number of effective trappers and their representation (percentage) among all licensed trappers, average season catch per effective trapper, and estimated total trapper harvest. Similar information for each of the 11 species, plus estimated density of effective trappers and furbearer harvest in each of the 10 wildlife management units, is provided in Tables 3 through 13. The original sample sizes from which these data were derived are presented in Table 14, which also provides the percent of effective trappers for each species.

The 95% confidence intervals for number of effective trappers, average season catch per effective trapper, and total harvest for each furbearer statewide are given in Table 15. In most instances, those species with the greater number of effective trappers in the sample have smaller limits of variability which result in greater confidence in the projections. For example, effective raccoon trappers were the most numerous in 1996-97 and their projected number varied by only  $\pm 3.82\%$ . The 95% confidence interval projections for less numerous gray fox trappers varied by  $\pm 44.35\%$  and for uncommon weasel trappers by  $\pm 117.65\%$ .

#### D. Distribution of Harvest Among Effective Trappers

The muskrat and raccoon were the 2 most important furbearers trapped during the 1996-97 season in terms of average season catch and total harvest (Table 2). They ranked first and third, respectively, for number of effective trappers. The reported number of muskrats harvested by 361 effective muskrat trappers ranged from 1 to 720 and averaged 29.41 (Fig. 10). During the season, 65.7% of these trappers harvested  $\leq 20$  muskrats and 95.8% caught  $\leq 100$ . The average number of muskrats taken by effective trappers was 27.2% less in 1996-97 than in 1995-96 (Anderson et al. 1996). Of the effective trappers who responded, 35 (9.7%) stated that their catch averaged  $\geq 1$  muskrats per day for the entire season.

The distribution of harvest among effective raccoon trappers was similar to that for muskrat. The number of raccoons caught by the 532 effective raccoon trappers for whom data were available averaged 38.38 and ranged from 1 to 502 (Fig. 11). Less than the average season catch was taken by 69.5% of these trappers. For the entire season, 38.0% of the trappers harvested  $\leq 15$  raccoons and 56.4% trapped  $\leq 25$ . Only 85 (16.0%) of the effective raccoon trappers reported making an average daily catch of  $\geq 1$  raccoons throughout the season.

The harvest of the other 9 open-season furbearers was distributed among effective trappers much like the muskrat and raccoon harvests (Table 16). For 3 of these species (gray fox, weasel, and badger),  $\leq 15\%$  of the effective trappers made season catches of  $> 5$  pelts. For the other species, the following percentages of effective trappers took  $> 5$  pelts: mink 18.9%, opossum 59.7%, red fox 15.6%, beaver 40.2%, striped skunk 17.3%, and coyote 24.0%.

The above data emphasize the inapplicability of bag limits (both daily and seasonal) to furbearer trapping in Illinois. Few trappers are successful in making large seasonal catches. The ones who do are active throughout the season over extensive areas. Reductions in season length offer the most potential for reducing the furbearer harvest by highly successful trappers. Bag limits could potentially increase harvest because of their goal-setting implications.

#### E. Management Zone Data Summary

Management zone and statewide data summaries for each of the 11 species of furbearers surveyed in 1996-97 are presented in Tables 17 through 27. The data for each species include estimated number and density of effective trappers, average season catch, estimated total trapper harvest, and trapper harvest per unit area. The northern and southern zones listed for 1996-97 are nearly identical to the zones employed for

regulatory management in previous years (1979-80 through 1995-96) (Fig. 7).

#### F. Types of Traps and Sets Used for Catching Mink

Of the effective mink trappers in the 1996-97 sample, 85.5% used standard foothold/leghold traps and 67.4% used body-gripping (Conibear) traps (Table 28). It was rare for mink trappers to use box/cage traps (2.9%) or snares (0.4%). Standard foothold/leghold traps comprised more than one-half (55.3%) of all traps used for catching mink. Body-gripping (Conibear) traps made up almost all (44.1%) of the other traps used on mink.

The vast majority of the mink caught with foothold/leghold traps were taken in "water set made specifically for mink" (38.7%) or "water set made for multiple species (not just mink)" (43.4%) (Table 29). An additional 6.4% of the mink catch was taken in "dry land set made specifically for mink", and another 6.4% was in "dry land set made for multiple species (not just mink)".

#### G. Fur Hunting by Trappers

A total of 200 trappers (30.35% of licensees sampled) reported hunting furbearers with gun and/or dogs in 1996-97 (Table 30). Their total hunting harvest was 30,755 pelts or an average of 26.71 per hunting trapper. This is equivalent to 13.19% of the total trapped catch estimated by this survey. The raccoon was hunted by more trappers than any other species. Next in popularity was the coyote. From 1986-87 through 1990-91, 25.91% to 29.47% of the trappers in Illinois also hunted furbearers (Hubert 1987, 1988, 1989; Anderson et al. 1990 and 1991). In 1993-94, 28.30% of Illinois' trappers also hunted furbearers (Anderson et al. 1995); 27.56% hunted in 1994-95 and 28.82% hunted in 1995-96 (Anderson et al. 1996 and 1997). Sampson (1973) reported 33.6% of the trappers in Missouri were fur hunters. Obviously, there is much overlap between the user groups designated as fur trappers and fur hunters.

#### H. Observations of Badgers, River Otters, and Bobcats

There were 9 trappers in the survey who reported catching badgers in Illinois in 1996-97. Eight of these trappers took 1 badger each and 1 trapper took 2 badgers. The 10 badgers were caught in 9 different counties, most of which were located in the west-central portions and northern half of the state (Fig. 12).

Participating trappers were also asked whether they saw river otter or sign, and/or saw bobcat or sign, during the past 3 years. Seventy trappers claimed they saw river otter or sign.

These trappers provided 69 reports of otter in 36 counties (Fig. 13). The reports came from counties throughout the state and most were associated with riverine habitat.

Sixty-two trappers said they saw bobcat or sign. These trappers provided 60 reports of bobcat in 35 counties (Fig. 14). The counties were located throughout the state.

## I. Changes in Furbearer Populations

When asked to express their opinions of changes in furbearer populations from 1995-96 to 1996-97, a plurality (42.2%) of the active trappers thought that raccoon numbers were up (Table 31). Conversely, a majority (50.6%) of the trappers thought that muskrat numbers were down. For the other 3 species, pluralities of the trappers who expressed opinions felt that beaver numbers were unchanged, red fox numbers were down, and coyote numbers were up.

## RECOMMENDATIONS:

The present Illinois Furbearer Trapping Survey probably realizes its best use and reliability for furbearer management as an indicator of trends in trapping pressure, success, harvest, and recreation. Until 1990, this survey (formerly called "Trapper Harvest Survey") provided the only regional harvest data available for the trapped portion of the annual furbearer catch. Beginning with the 1990-91 season, another survey, entitled "Illinois Fur Hunter/Trapper Survey", was created. Because the mailing list for this survey was derived from purchasers of the Illinois Furbearer Stamp, it provided data for both fur hunter and fur trapper activities.

Both the Fur Hunter/Trapper Survey and the Furbearer Trapping Survey were conducted during the 1990-91 season in order to have a year of overlap in the 2 data sets for trapping activities. Because there was a high level of agreement between the 2 surveys (Anderson and Campbell 1992), the Furbearer Trapping Survey was discontinued. The Fur Hunter/Trapper Survey was continued through the 1991-92 and 1992-93 seasons.

The creation of the Illinois Habitat Stamp in 1993 was accompanied by a legislative mandate to discontinue the Illinois Furbearer Stamp after the 1992 season. The Habitat Stamp is required for most people who take or attempt to take any game species in Illinois except waterfowl. Because of these changes, the Fur Hunter/Trapper Survey was replaced with two separate surveys: (1) the present Furbearer Trapping survey, which will be conducted annually and will sample purchasers of the resident trapping license, and (2) a Furbearer Hunter Survey, which will be conducted periodically and will sample purchasers of the

Habitat Stamp who indicate on the stamp stub that they hunted furbearers during the previous year.

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#### DATA AND REPORTS:

Original data and reports in this investigation are on file in the Investigations and Surveys Program offices, Natural Resources Studies Annex, Champaign, Illinois 61820.

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APPROVED BY: 

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DATE: 2/5/98

Table 1. Furbearer trapping seasons in Illinois, 1996-97.

Species	Trapping Seasons	
	Northern Zone	Southern Zone
Muskrat, mink, raccoon, opossum, striped skunk, weasel	5 Nov - 10 Jan (67) <sup>a</sup>	10 Nov - 15 Jan (67)
Beaver	5 Nov - 31 Mar (147) <sup>b</sup>	10 Nov - 31 Mar (142)
Red fox, gray fox, coyote, badger	10 Nov - 15 Jan (67)	10 Nov - 15 Jan (67)

<sup>a</sup>Numbers in parentheses are season lengths in days.

<sup>b</sup>Those portions of Carroll, Whiteside, and Rock Island counties lying west of Illinois Rt. 84 from Interstate 80 north to the JoDaviess county line were open to beaver trapping from 5 Nov. 1996 - 10 Jan. 1997 only.



Table 2. Summary of statewide data from post-season mail survey of resident trappers in Illinois, 1996-97 season (n=659).

Species	Estimated Number of Effective Trappers	Percent of Licensed Trappers	Average Season Catch	Estimated Total Trapper Harvest	Estimated Percent Sold	Estimated Total Sold
Muskrat	2078	54.78	29.41	61119	95.11	58131
Mink	1468	38.69	3.85	5648	97.66	5515
Raccoon	3063	80.73	38.38	117556	96.92	113935
Opossum	2124	55.99	13.89	29500	85.36	25182
Red fox	518	13.66	2.83	1468	94.90	1393
Gray fox	115	3.03	1.85	213	91.89	196
Beaver	1393	36.72	8.02	11180	91.09	10185
Skunk	725	19.12	3.50	2539	29.02	737
Weasel	17	0.46	1.00	17	66.67	12
Coyote	622	16.39	6.28	3903	87.61	3420
Badger	52	1.37	1.11	58	70.00	40

Table 3. Summary of muskrat trapper and harvest data by wildlife management units in Illinois, 1996-97 season (n=361).

Wildlife Management Unit	Estimated Number of Effective Trappers	Estimated Number of Effective Trappers/100km <sup>2</sup>	Average Season Catch	Estimated Total Trapper Harvest	Estimated Trapper Harvest/100km <sup>2</sup>
Northwest Hills	242 ( 11.6)	2.57	83.52	20196	214.88
Northeast Moraine	138 ( 6.6)	1.67	31.33	4329	52.34
Mississippi Border-North	109 ( 5.3)	1.39	10.74	1174	14.97
Mississippi Border-South	213 ( 10.2)	1.56	23.54	5015	36.67
Western Prairie/Forest	202 ( 9.7)	1.40	20.09	4047	28.07
Central Sand Prairie	81 ( 3.9)	1.94	24.79	1998	48.17
Grand Prairie	622 ( 29.9)	1.18	27.38	17024	32.35
Southern Plain	363 ( 17.5)	1.53	17.84	6471	27.27
Wabash Border	86 ( 4.2)	1.28	7.20	622	9.22
Shawnee Hills	23 ( 1.1)	0.44	10.50	242	4.64
Unknown	0 ( 0.0)	0.00	0.00	0	0.00
Statewide	2078 (100.0)	1.42	29.41	61119	41.84

Table 4. Summary of mink trapper and harvest data by wildlife management units in Illinois, 1996-97 season (n=255).

Wildlife Management Unit	Estimated Number of Effective Trappers	Estimated Number of Trappers/100km <sup>2</sup>	Average Season Catch	Estimated Total Trapper Harvest	Estimated Trapper Harvest/100km <sup>2</sup>
Northwest Hills	155 ( 10.6)	1.65	4.11	639	6.80
Northeast Moraine	92 ( 6.3)	1.11	6.63	610	7.38
Mississippi Border-North	81 ( 5.5)	1.03	2.29	184	2.35
Mississippi Border-South	127 ( 8.6)	0.93	3.95	501	3.66
Western Prairie/Forest	150 ( 10.2)	1.04	2.19	328	2.28
Central Sand Prairie	40 ( 2.7)	0.97	2.71	109	2.64
Grand Prairie	466 ( 31.8)	0.89	4.23	1975	3.75
Southern Plain	282 ( 19.2)	1.19	3.51	990	4.17
Wabash Border	52 ( 3.5)	0.77	2.67	138	2.05
Shawnee Hills	23 ( 1.6)	0.44	7.50	173	3.31
Unknown	0 ( 0.0)	0.00	0.00	0	0.00
Statewide	1468 (100.0)	1.01	3.85	5648	3.87

Table 5. Summary of raccoon trapper and harvest data by wildlife management units in Illinois, 1996-97 season (n=532).

Wildlife Management Unit	Estimated Number of Effective Trappers	Estimated Number of Trappers/100km <sup>2</sup>	Average Season Catch	Estimated Total Trapper Harvest	Estimated Trapper Harvest/100km <sup>2</sup>
Northwest Hills	351 ( 11.5)	3.74	52.62	18481	196.62
Northeast Moraine	178 ( 5.8)	2.16	38.81	6926	83.73
Mississippi Border-North	202 ( 6.6)	2.57	52.29	10536	134.25
Mississippi Border-South	345 ( 11.3)	2.53	32.72	11301	82.64
Western Prairie/Forest	345 ( 11.3)	2.40	42.65	14733	102.16
Central Sand Prairie	109 ( 3.6)	2.64	47.95	5245	126.47
Grand Prairie	892 ( 29.1)	1.70	35.10	31325	59.52
Southern Plain	461 ( 15.0)	1.94	30.01	13823	58.26
Wabash Border	121 ( 3.9)	1.79	33.29	4024	59.69
Shawnee Hills	52 ( 1.7)	0.99	20.78	1077	20.64
Unknown	0 ( 0.0)	0.00	0.00	0	0.00
Statewide	3063 (100.0)	2.10	38.38	117556	80.48

Table 6. Summary of opossum trapper and harvest data by wildlife management units in Illinois, 1996-97 season (n=369).

Wildlife Management Unit	Estimated Number of Effective Trappers	Estimated Number of Trappers/100km <sup>2</sup>	Average Season Catch	Estimated Total Trapper Harvest	Estimated Trapper Harvest/100km <sup>2</sup>
Northwest Hills	253 ( 11.9)	2.70	18.64	4721	50.23
Northeast Moraine	121 ( 5.7)	1.46	13.62	1647	19.91
Mississippi Border-North	138 ( 6.5)	1.76	26.04	3598	45.85
Mississippi Border-South	230 ( 10.8)	1.68	15.70	3616	26.44
Western Prairie/Forest	230 ( 10.8)	1.60	12.50	2879	19.96
Central Sand Prairie	75 ( 3.5)	1.80	6.85	512	12.36
Grand Prairie	628 ( 29.5)	1.19	12.15	7623	14.48
Southern Plain	345 ( 16.3)	1.46	11.35	3921	16.52
Wabash Border	63 ( 3.0)	0.94	10.27	651	9.65
Shawnee Hills	35 ( 1.6)	0.66	9.00	311	5.96
Unknown	0 ( 0.0)	0.00	0.00	0	0.00
Statewide	2124 (100.0)	1.45	13.89	29500	20.19

Table 7. Summary of red fox trapper and harvest data by wildlife management units in Illinois, 1996-97 season (n=90).

Wildlife Management Unit	Estimated Number of Effective Trappers	Estimated Number of Trappers/100km <sup>2</sup>	Average Season Catch	Estimated Total Trapper Harvest	Estimated Trapper Harvest/100km <sup>2</sup>
Northwest Hills	40 ( 7.8)	0.43	2.00	81	0.86
Northeast Moraine	29 ( 5.6)	0.35	3.00	86	1.04
Mississippi Border-North	29 ( 5.6)	0.37	4.00	115	1.47
Mississippi Border-South	63 ( 12.2)	0.46	3.27	207	1.52
Western Prairie/Forest	46 ( 8.9)	0.32	1.50	69	0.48
Central Sand Prairie	23 ( 4.4)	0.56	4.50	104	2.50
Grand Prairie	121 ( 23.3)	0.23	2.52	305	0.58
Southern Plain	132 ( 25.6)	0.56	2.70	357	1.50
Wabash Border	23 ( 4.4)	0.34	3.50	81	1.20
Shawnee Hills	12 ( 2.2)	0.22	5.50	63	1.21
Unknown	0 ( 0.0)	0.00	0.00	0	0.00
Statewide	518 (100.0)	0.35	2.83	1468	1.01

Table 8. Summary of gray fox trapper and harvest data by wildlife management units in Illinois, 1996-97 season (n=20).

Wildlife Management Unit	Estimated Number of Effective Trappers	Estimated Number of Effective Trappers/100km2	Average Season Catch	Estimated Total Trapper Harvest	Estimated Trapper Harvest/100km2
Northwest Hills	0 ( 0.0)	0.00	0.00	0	0.00
Northeast Moraine	6 ( 5.0)	0.07	2.00	12	0.14
Mississippi Border-North	0 ( 0.0)	0.00	0.00	0	0.00
Mississippi Border-South	23 ( 20.0)	0.17	1.75	40	0.29
Western Prairie/Forest	12 ( 10.0)	0.08	1.00	12	0.08
Central Sand Prairie	6 ( 5.0)	0.14	1.00	6	0.14
Grand Prairie	17 ( 15.0)	0.03	1.33	23	0.04
Southern Plain	35 ( 30.0)	0.15	2.17	75	0.32
Wabash Border	6 ( 5.0)	0.09	1.00	6	0.09
Shawnee Hills	12 ( 10.0)	0.22	3.50	40	0.77
Unknown	0 ( 0.0)	0.00	0.00	0	0.00
Statewide	115 (100.0)	0.08	1.85	213	0.15

Table 9. Summary of beaver trapper and harvest data by wildlife management units in Illinois, 1996-97 season (n=242).

Wildlife Management Unit	Estimated Number of Effective Trappers	Estimated Number of Trappers/ 100km <sup>2</sup>	Average Season Catch	Estimated Total Trapper Harvest	Estimated Trapper Harvest/100km <sup>2</sup>
Northwest Hills	155 ( 11.2)	1.65	6.59	1025	10.90
Northeast Moraine	86 ( 6.2)	1.04	12.33	1065	12.88
Mississippi Border-North	63 ( 4.5)	0.81	13.09	829	10.56
Mississippi Border-South	127 ( 9.1)	0.93	5.23	662	4.84
Western Prairie/Forest	144 ( 10.3)	1.00	4.36	628	4.35
Central Sand Prairie	63 ( 4.5)	1.53	19.82	1255	30.26
Grand Prairie	518 ( 37.2)	0.98	6.20	3213	6.10
Southern Plain	155 ( 11.2)	0.66	9.74	1514	6.38
Wabash Border	58 ( 4.1)	0.85	6.30	363	5.38
Shawnee Hills	23 ( 1.7)	0.44	27.25	628	12.03
Unknown	0 ( 0.0)	0.00	0.00	0	0.00
Statewide	1393 (100.0)	0.95	8.02	11180	7.65



Table 10. Summary of skunk trapper and harvest data by wildlife management units in Illinois, 1996-97 season (n=126).

Wildlife Management Unit	Estimated Number of Effective Trappers	Estimated Number of Effective Trappers/100km <sup>2</sup>	Average Season Catch	Estimated Total Trapper Harvest	Estimated Trapper Harvest/100km <sup>2</sup>
Northwest Hills	98 ( 13.5)	1.04	4.12	403	4.29
Northeast Moraine	58 ( 7.9)	0.70	9.00	518	6.26
Mississippi Border-North	29 ( 4.0)	0.37	6.20	178	2.27
Mississippi Border-South	52 ( 7.1)	0.38	1.44	75	0.55
Western Prairie/Forest	58 ( 7.9)	0.40	1.50	86	0.60
Central Sand Prairie	23 ( 3.2)	0.56	2.25	52	1.25
Grand Prairie	271 ( 37.3)	0.51	3.55	961	1.83
Southern Plain	92 ( 12.7)	0.39	1.88	173	0.73
Wabash Border	29 ( 4.0)	0.43	1.20	35	0.51
Shawnee Hills	17 ( 2.4)	0.33	3.33	58	1.10
Unknown	0 ( 0.0)	0.00	0.00	0	0.00
Statewide	725 (100.0)	0.50	3.50	2539	1.74

Table 11. Summary of weasel trapper and harvest data by wildlife management units in Illinois, 1996-97 season (n=3).

Wildlife Management Unit	Estimated Number of Effective Trappers	Estimated Number of Trappers/ 100km <sup>2</sup>	Average Season Catch	Estimated Total Trapper Harvest	Estimated Trapper Harvest/100km <sup>2</sup>
Northwest Hills	0 ( 0.0)	0.00	0.00	0	0.00
Northeast Moraine	0 ( 0.0)	0.00	0.00	0	0.00
Mississippi Border-North	0 ( 0.0)	0.00	0.00	0	0.00
Mississippi Border-South	6 ( 33.3)	0.04	1.00	6	0.04
Western Prairie/Forest	0 ( 0.0)	0.00	0.00	0	0.00
Central Sand Prairie	0 ( 0.0)	0.00	0.00	0	0.00
Grand Prairie	6 ( 33.3)	0.01	1.00	6	0.01
Southern Plain	6 ( 33.3)	0.02	1.00	6	0.02
Wabash Border	0 ( 0.0)	0.00	0.00	0	0.00
Shawnee Hills	0 ( 0.0)	0.00	0.00	0	0.00
Unknown	0 ( 0.0)	0.00	0.00	0	0.00
Statewide	17 (100.0)	0.01	1.00	17	0.01

Table 12. Summary of coyote trapper and harvest data by wildlife management units in Illinois, 1996-97 season (n=108).

Wildlife Management Unit	Estimated Number of Effective Trappers	Estimated Number of Trappers/100km <sup>2</sup>	Average Season Catch	Estimated Total Trapper Harvest	Estimated Trapper Harvest/100km <sup>2</sup>
Northwest Hills	63 ( 10.2)	0.67	7.09	449	4.78
Northeast Moraine	46 ( 7.4)	0.56	7.50	345	4.18
Mississippi Border-North	58 ( 9.3)	0.73	4.50	259	3.30
Mississippi Border-South	52 ( 8.3)	0.38	2.78	144	1.05
Western Prairie/Forest	69 ( 11.1)	0.48	3.42	236	1.64
Central Sand Prairie	12 ( 1.9)	0.28	13.50	155	3.75
Grand Prairie	196 ( 31.5)	0.37	3.88	760	1.44
Southern Plain	81 ( 13.0)	0.34	15.79	1272	5.36
Wabash Border	35 ( 5.6)	0.51	6.83	236	3.50
Shawnee Hills	12 ( 1.9)	0.22	4.00	46	0.88
Unknown	0 ( 0.0)	0.00	0.00	0	0.00
Statewide	622 (100.0)	0.43	6.28	3903	2.67

Table 13. Summary of badger trapper and harvest data by wildlife management units in Illinois, 1996-97 season (n=9).

Wildlife Management Unit	Estimated Number of Effective Trappers	Estimated Number of Effective Trappers/100km <sup>2</sup>	Average Season Catch	Estimated Total Trapper Harvest	Estimated Trapper Harvest/100km <sup>2</sup>
Northwest Hills	6 ( 11.1)	0.06	2.00	12	0.12
Northeast Moraine	0 ( 0.0)	0.00	0.00	0	0.00
Mississippi Border-North	12 ( 22.2)	0.15	1.00	12	0.15
Mississippi Border-South	0 ( 0.0)	0.00	0.00	0	0.00
Western Prairie/Forest	0 ( 0.0)	0.00	0.00	0	0.00
Central Sand Prairie	0 ( 0.0)	0.00	0.00	0	0.00
Grand Prairie	29 ( 55.6)	0.05	1.00	29	0.05
Southern Plain	6 ( 11.1)	0.02	1.00	6	0.02
Wabash Border	0 ( 0.0)	0.00	0.00	0	0.00
Shawnee Hills	0 ( 0.0)	0.00	0.00	0	0.00
Unknown	0 ( 0.0)	0.00	0.00	0	0.00
Statewide	52 (100.0)	0.04	1.11	58	0.04

Table 14. Statewide sample sizes for post-season mail survey of resident fur trappers in Illinois, 1996-97 season (n=659).

Species	Number of Effective Trappers In Sample	Percent Effective Trappers	Season Harvest by Effective Trappers in Sample
Muskrat	361	9.52	10616
Mink	255	6.72	981
Raccoon	532	14.02	20419
Opossum	369	9.73	5124
Red fox	90	2.37	255
Gray fox	20	0.53	37
Beaver	242	6.38	1942
Skunk	126	3.32	441
Weasel	3	0.08	3
Coyote	108	2.85	678
Badger	9	0.24	10

Table 15. Confidence intervals (95%) for estimated number of effective trappers, average season harvest, and total trapper harvest by species in Illinois, 1996-97 season (n=659).

Species	Estimated Number of Effective Trappers	Estimated Average Season Catch	Estimated Total Harvest
Muskrat	2078 $\pm$ 147	29.41 $\pm$ 6.24	61119 $\pm$ 13827
Mink	1468 $\pm$ 144	3.85 $\pm$ 0.65	5648 $\pm$ 1179
Raccoon	3063 $\pm$ 117	38.38 $\pm$ 4.22	117556 $\pm$ 13462
Opossum	2124 $\pm$ 147	13.89 $\pm$ 2.02	29500 $\pm$ 4804
Red fox	518 $\pm$ 102	2.83 $\pm$ 0.59	1468 $\pm$ 495
Gray fox	115 $\pm$ 51	1.85 $\pm$ 0.54	213 $\pm$ 157
Beaver	1393 $\pm$ 142	8.02 $\pm$ 1.48	11180 $\pm$ 2432
Skunk	725 $\pm$ 116	3.50 $\pm$ 0.86	2539 $\pm$ 818
Weasel	17 $\pm$ 20	1.00 $\pm$ 0.00	17 $\pm$ 40
Coyote	622 $\pm$ 109	6.28 $\pm$ 2.37	3903 $\pm$ 1694
Badger	52 $\pm$ 34	1.11 $\pm$ 0.22	58 $\pm$ 146

Table 16. Distribution of furbearer harvest among effective trappers in Illinois, 1996-97 season.  
Sample sizes are in parentheses.

Total Season Catch	Percentage of Effective Trappers										
	Muskrat ( 361)	Mink ( 255)	Raccoon ( 532)	Opossum ( 369)	Red fox ( 90)	Gray fox ( 20)	Beaver ( 242)	Striped skunk ( 126)	Weasel ( 3)	Coyote ( 108)	Badger ( 9)
1	8.9	39.6	2.6	7.3	45.6	55.0	19.4	43.7	100.0	30.6	88.9
2	7.8	23.9	1.3	8.9	20.0	25.0	16.5	18.3	0.0	25.0	11.1
3	5.5	9.0	3.9	7.9	12.2	5.0	10.7	15.1	0.0	9.3	0.0
4	4.4	5.5	3.9	9.2	4.4	10.0	7.0	4.0	0.0	6.5	0.0
5	5.0	3.1	4.9	7.0	2.2	5.0	6.2	1.6	0.0	4.6	0.0
6	4.2	4.3	1.7	6.5	3.3	0.0	7.0	4.8	0.0	1.9	0.0
7	2.2	2.7	2.1	3.0	3.3	0.0	2.9	2.4	0.0	5.6	0.0
8	1.9	2.0	2.1	4.1	5.6	0.0	1.7	1.6	0.0	0.9	0.0
9	0.3	0.4	1.9	0.8	0.0	0.0	2.5	0.8	0.0	0.9	0.0
10	4.7	1.2	4.5	7.0	0.0	0.0	2.9	2.4	0.0	2.8	0.0
11	0.8	0.0	0.8	1.1	1.1	0.0	1.7	0.8	0.0	1.9	0.0
12	2.5	1.2	2.3	5.4	1.1	0.0	5.0	0.0	0.0	0.9	0.0
13	1.9	0.4	0.9	0.8	0.0	0.0	0.8	0.0	0.0	0.0	0.0
14	2.8	1.2	1.7	1.6	0.0	0.0	1.2	0.0	0.0	0.0	0.0
15	4.4	0.4	3.4	3.3	0.0	0.0	0.4	1.6	0.0	0.0	0.0
16-20	8.3	2.0	10.9	9.8	1.1	0.0	5.4	1.6	0.0	0.9	0.0
20-25	4.2	2.4	7.5	3.0	0.0	0.0	3.3	0.0	0.0	2.8	0.0
>25	30.2	0.8	43.6	13.3	0.0	0.0	5.4	1.6	0.0	5.6	0.0

Table 17. Summary of muskrat trapper and harvest data by furbearer management zones in Illinois, 1996-97 season (n=361).

Area	Estimated Number of Effective Trappers	Estimated Number of Effective Trappers/100km <sup>2</sup>	Average Season Catch	Estimated Total Trapper Harvest	Estimated Trapper Harvest/100km <sup>2</sup>
North Zone	1186 ( 57.1)	1.45	36.80 +/- 10.38	43645 ( 71.4)	53.33
South Zone	892 ( 42.9)	1.39	19.58 +/- 4.12	17473 ( 28.6)	27.20
Unknown	0 ( 0.0)	..	..	0	..
Statewide	2078 (100.0)	1.42	29.41 +/- 6.32	61119	41.84



Table 18. Summary of mink trapper and harvest data by furbearer management zones in Illinois, 1996-97 season (n=255).

Area	Estimated Number of Effective Trappers	Estimated Number of Effective Trappers/100km <sup>2</sup>	Average Season Catch	Estimated Total Trapper Harvest	Estimated Trapper Harvest/100km <sup>2</sup>
North Zone	829 ( 56.5)	1.01	3.82 +/- 0.88	3166 ( 56.1)	3.87
South Zone	639 ( 43.5)	0.99	3.88 +/- 0.98	2481 ( 43.9)	3.86
Unknown	0 ( 0.0)	..	..	0	..
Statewide	1468 (100.0)	1.01	3.85 +/- 0.65	5648	3.87

Table 19. Summary of raccoon trapper and harvest data by furbearer management zones in Illinois, 1996-97 season (n=532).

Area	Estimated Number of Effective Trappers	Estimated Number of Effective Trappers/100km <sup>2</sup>	Average Season Catch	Estimated Total Trapper Harvest	Estimated Trapper Harvest/100km <sup>2</sup>
North Zone	1825 ( 59.6)	2.23	40.97 +/- 5.57	74780 ( 63.6)	91.38
South Zone	1232 ( 40.2)	1.92	34.65 +/- 6.43	42690 ( 36.3)	66.45
Unknown	0 ( 0.0)	..	..	0	..
Statewide	3063 (100.0)	2.10	38.38 +/- 4.23	117556	80.48

Table 20. Summary of opossum trapper and harvest data by furbearer management zones in Illinois, 1996-97 season (n=369).

Area	Estimated Number of Effective Trappers	Estimated Number of Effective Trappers/100km <sup>2</sup>	Average Season Catch	Estimated Total Trapper Harvest	Estimated Trapper Harvest/100km <sup>2</sup>
North Zone	1255 ( 59.1)	1.53	14.84 +/- 2.74	18630 ( 63.2)	22.77
South Zone	864 ( 40.7)	1.34	12.56 +/- 2.99	10847 ( 36.8)	16.88
Unknown	0 ( 0.0)	..	..	0	..
Statewide	2124 (100.0)	1.45	13.89 +/- 2.03	29500	20.19

Table 21. Summary of red fox trapper and harvest data by furbearer management zones in Illinois, 1996-97 season (n=90).

Area	Estimated Number of Effective Trappers	Estimated Number of Effective Trappers/100km <sup>2</sup>	Average Season Catch	Estimated Total Trapper Harvest	Estimated Trapper Harvest/100km <sup>2</sup>
North Zone	259 ( 50.0)	0.32	2.62 +/- 0.91	679 ( 46.3)	0.83
South Zone	259 ( 50.0)	0.40	3.04 +/- 0.77	789 ( 53.7)	1.23
Unknown	0 ( 0.0)	..	..	0	..
Statewide	518 (100.0)	0.35	2.83 +/- 0.59	1468	1.01

Table 22. Summary of gray fox trapper and harvest data by furbearer management zones in Illinois, 1996-97 season (n=20).

Area	Estimated Number of Effective Trappers	Estimated Number of Effective Trappers/100km <sup>2</sup>	Average Season Catch	Estimated Total Trapper Harvest	Estimated Trapper Harvest/100km <sup>2</sup>
North Zone	17 ( 15.0)	0.02	1.33 +/- 0.65	23 ( 10.8)	0.03
South Zone	98 ( 85.0)	0.15	1.94 +/- 0.62	190 ( 89.2)	0.30
Unknown	0 ( 0.0)	..	..	0	..
Statewide	115 (100.0)	0.08	1.85 +/- 0.54	213	0.15

Table 23. Summary of beaver trapper and harvest data by furbearer management zones in Illinois, 1996-97 season (n=242).

Area	Estimated Number of Effective Trappers	Estimated Number of Effective Trappers/100km <sup>2</sup>	Average Season Catch	Estimated Total Trapper Harvest	Estimated Trapper Harvest/100km <sup>2</sup>
North Zone	910 ( 65.3)	1.11	8.32 +/- 1.74	7565 ( 67.7)	9.24
South Zone	484 ( 34.7)	0.75	7.48 +/- 2.75	3616 ( 32.3)	5.63
Unknown	0 ( 0.0)	..	..	0	..
Statewide	1393 (100.0)	0.95	8.02 +/- 1.48	11180	7.65

Table 24. Summary of skunk trapper and harvest data by furbearer management zones in Illinois, 1996-97 season (n=126).

Area	Estimated Number of Effective Trappers	Estimated Number of Effective Trappers/100km <sup>2</sup>	Average Season Catch	Estimated Total Trapper Harvest	Estimated Trapper Harvest/100km <sup>2</sup>
North Zone	478 ( 65.9)	0.58	4.40 +/- 1.26	2101 ( 82.8)	2.57
South Zone	248 ( 34.1)	0.39	1.77 +/- 0.34	438 ( 17.2)	0.68
Unknown	0 ( 0.0)	..	..	0	..
Statewide	725 (100.0)	0.50	3.50 +/- 0.91	2539	1.74

Table 25. Summary of weasel trapper and harvest data by furbearer management zones in Illinois, 1996-97 season (n=3).

Area	Estimated Number of Effective Trappers	Estimated Number of Effective Trappers/100km <sup>2</sup>	Average Season Catch	Estimated Total Trapper Harvest	Estimated Trapper Harvest/100km <sup>2</sup>
North Zone	0 ( 0.0)	0.00	0.00 +/- 0.00	0 ( 0.0)	0.00
South Zone	17 (100.0)	0.03	1.00 +/- 0.00	17 (100.0)	0.03
Unknown	0 ( 0.0)	..	..	0	..
Statewide	17 (100.0)	0.01	1.00 +/- 0.00	17	0.01



Table 26. Summary of coyote trapper and harvest data by furbearer management zones in Illinois, 1996-97 season (n=108).

Area	Estimated Number of Effective Trappers	Estimated Number of Effective Trappers/100km <sup>2</sup>	Average Season Catch	Estimated Total Trapper Harvest	Estimated Trapper Harvest/100km <sup>2</sup>
North Zone	368 ( 59.3)	0.45	5.34 +/- 1.95	1969 ( 50.4)	2.41
South Zone	253 ( 40.7)	0.39	7.64 +/- 5.10	1934 ( 49.6)	3.01
Unknown	0 ( 0.0)	::	::	0	::
Statewide	622 (100.0)	0.43	6.28 +/- 2.39	3903	2.67

Table 27. Summary of badger trapper and harvest data by furbearer management zones in Illinois, 1996-97 season (n=9).

Area	Estimated Number of Effective Trappers	Estimated Number of Effective Trappers/100km <sup>2</sup>	Average Season Catch	Estimated Total Trapper Harvest	Estimated Trapper Harvest/100km <sup>2</sup>
North Zone	40 ( 77.8)	0.05	1.14 +/- 0.28	46 ( 80.0)	0.06
South Zone	12 ( 22.2)	0.02	1.00 +/- 0.00	12 ( 20.0)	0.02
Unknown	0 ( 0.0)	..	..	0	..
Statewide	52 (100.0)	0.04	1.11 +/- 0.23	58	0.04

Table 28. Types and numbers of traps set for mink in Illinois, 1996-97 season. Sample sizes are in parentheses.

Type of Trap	Trappers <sup>a</sup>		Traps	
	Number	Percentage	Mean Per Owner	Percentage of Total
		(242)		(3,730)
Standard foothold/leghold	207	85.5	10.0	55.4
Body-gripping (Conibear)	163	67.4	10.1	44.1
Cage/box	7	2.9	1.9	0.4
Snares	1	0.4	3.0	0.1
Other <sup>b</sup>	1	0.4	1.0	<0.1

<sup>a</sup>Mink trappers who answered the question.

<sup>b</sup>One trapper reported using 1 tunnel trap.

Table 29. Percentages of mink catch taken with foothold/  
leghold traps that were caught in different types of  
sets in Illinois, 1996-97 season. Sample size is in  
parentheses.

Type of Set	Percentage of Mink Catch
	(174) <sup>a</sup>
Dry land set made specifically for mink . . . . .	6.4
Dry land set made for multiple species (not just mink) . . . . .	6.4
Water set made specifically for mink . . . . .	38.7
Water set made for multiple species (not just mink) . . . . .	43.4
Other . . . . .	2.6
Don't know . . . . .	2.5
Total . . . . .	100

<sup>a</sup>Mink trappers who answered the question.

Table 30. Summary of fur hunting activities by trappers<sup>a</sup> in Illinois, 1996-97 season (n=659).

Species	Number of Trappers in Sample Hunting Species	Number of Furbearers Harvested by Hunting	Average Number Harvested by Hunting	Estimated Percent of All Trappers Effectively Hunting Species	Estimated Total Harvest by All Trappers Effectively Hunting Species
Raccoon	160	4,511	28.19	24.28	25,970
Opossum	48	230	4.79	7.28	1,324
Red fox	14	55	3.93	2.12	317
Gray fox	2	2	1.00	0.30	12
Striped skunk	8	29	3.63	1.21	167
Coyote	77	515	6.69	11.68	2,965
All species	200 <sup>b</sup>	5,342	26.71	30.35	30,755

<sup>a</sup>Active and inactive trappers.

<sup>b</sup>Total for all species is less than the sum of the above values because many trappers hunted >1 species.

Table 31. Assessments by fur trappers<sup>a</sup> as to changes in furbearer populations from 1995-96 season to 1996-97 season. Sample sizes are in parentheses.

Species		Percentage of Active Trappers			
		Up	Unchanged	Down	Don't Know
Muskrat	(494)	4.9	19.6	50.6	24.9
Raccoon	(524)	42.2	34.2	8.8	14.8
Red fox	(437)	10.3	20.6	23.3	45.8
Beaver	(458)	27.9	29.5	9.8	32.8
Coyote	(449)	34.3	23.4	6.7	35.6

<sup>a</sup>Active trappers.

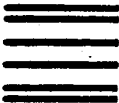
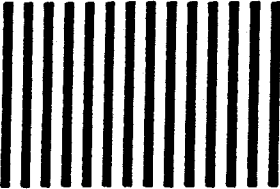


	<div style="border: 1px solid black; padding: 5px; width: fit-content; margin: 0 auto;">             No Postage Necessary If Mailed in the United States           </div> 	<div style="background-color: black; color: white; padding: 10px; margin-bottom: 10px;"> <b>BUSINESS REPLY MAIL</b>  <small>FIRST CLASS PERMIT NO. 2032 • SPRINGFIELD, IL</small> </div> <p style="margin: 0;">Postage Will Be Paid By Addressee</p> <p style="margin: 0;"><b>DEPARTMENT OF NATURAL RESOURCES</b>  <b>Wildlife Resources Division</b>  <b>Furbearer Section</b>  <small>P.O. BOX 19225          SPRINGFIELD, ILLINOIS 62794-9961</small></p> 											
<p><b>TO ISSUING CLERK:</b></p> <p style="text-align: center;"><b>COMPLETE THIS FORM AND MAIL IMMEDIATELY UPON SALE OF FIRST LICENSE IN BOOK</b></p> <p>The Department of Natural Resources is conducting a survey to estimate the fur harvest in Illinois. To effect this, we need the names and addresses of part of our licensed trappers. Please print at the bottom of this page, in the space provided, name, mailing address including zip code, and county of residence of the person who purchases the first license in this book. Please detach the next page and give to license purchaser.</p> <p>Thank you for your cooperation. Please note reverse side is Business Reply postal card, perforated at binding for removing.</p> <p style="text-align: center;"><b>MAIL IMMEDIATELY UPON SALE OF LICENSE TRAPPING (1996 SERIES)</b> Please Print Plainly</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="padding: 2px;">Name</td> <td style="padding: 2px;">TRAPPER JOHN</td> </tr> <tr> <td style="padding: 2px;">Street Address, R.R. and Box Number</td> <td style="padding: 2px;">RR 1, BOX 23</td> </tr> <tr> <td style="padding: 2px;">City and State</td> <td style="padding: 2px;">HOMETOWN</td> </tr> <tr> <td style="padding: 2px;">Zip Code</td> <td style="padding: 2px;">61234</td> </tr> <tr> <td style="padding: 2px;">County of Residence</td> <td style="padding: 2px;">SANGAMON</td> </tr> </table>				Name	TRAPPER JOHN	Street Address, R.R. and Box Number	RR 1, BOX 23	City and State	HOMETOWN	Zip Code	61234	County of Residence	SANGAMON
Name	TRAPPER JOHN												
Street Address, R.R. and Box Number	RR 1, BOX 23												
City and State	HOMETOWN												
Zip Code	61234												
County of Residence	SANGAMON												

Figure 1. The name/address card that was issued to license vendors for conducting the 1996-97 post-season Illinois Furbearer Trapping Survey.

DETACH THIS PAGE AND GIVE TO  
PERSON WHO PURCHASES FIRST  
LICENSE IN BOOK

Dear Trapper:

Please keep an accurate record of the number of days you had traps set, the average number and kinds of traps you used during the season, the number of furbearers you caught in traps, what county you trapped in most, and the number and kinds of pelts you sold in Illinois and Out of State.

You may be one of the selected trappers contacted at the close of the trapping season and provided a form to return to the Illinois Department of Conservation.

Thanks for your cooperation.

THE BACK SIDE OF THIS CARD MAY BE USED FOR RECORD KEEPING.

Number of TRAPS I had set: \_\_\_\_\_

Number of DAYS I had traps set: \_\_\_\_\_

FURBEARERS CAUGHT IN TRAPS: \_\_\_\_\_

Species	Total Number Caught	Number Sold	
		In Illinois	Out-of- State
Muskrat			
Mink			
Raccoon			
Opossum			
Beaver			
Red Fox			
Gray Fox			
Coyote			
Striped Skunk			
Weasel			

Other Animals Caught: \_\_\_\_\_

Figure 2. Information/activity record card that was issued to trappers for conducting the 1996-97 post-season Illinois Furbearer Trapping Survey.



# ILLINOIS FURBEARER TRAPPING SURVEY

1996-97 SEASON



## PART A - TRAPPING ACTIVITY

1. Did you SET ANY TRAPS for furbearers in Illinois during the 1996-97 season? (Circle number for appropriate answer)

Yes ... 1

No ... 2

If YES, continue with Question #2. If NO, go to Question #6.

2. In which COUNTY did you do MOST of your trapping? \_\_\_\_\_ County, Illinois
3. How many days (or nights) did you have traps set? \_\_\_\_\_ days (or nights)
4. What was the AVERAGE number of traps you had set on your trapline during the 1996-97 season?  
\_\_\_\_\_ traps

## PART B - HARVEST (TRAPPING ONLY)

5. Fill in ALL FOUR BLANKS for each kind of furbearer you TRAPPED in Illinois during the 1996-97 season. REPORT ONLY YOUR PERSONAL CATCH. If you trapped in partnership with another person, list only your half of the catch.

Species	TOTAL Number Caught in traps	Number SOLD IN ILLINOIS	Number SOLD OR SHIPPED OUT OF STATE	Number NOT SOLD
Muskrat	_____	_____	_____	_____
Mink	_____	_____	_____	_____
Raccoon	_____	_____	_____	_____
Opossum	_____	_____	_____	_____
Red fox	_____	_____	_____	_____
Gray fox	_____	_____	_____	_____
Beaver	_____	_____	_____	_____
Skunk	_____	_____	_____	_____
Weasel	_____	_____	_____	_____
Coyote	_____	_____	_____	_____
Badger	_____	_____	_____	_____

(Over)

Figure 3. The questionnaire used to conduct the 1996-97 post-season Illinois Furbearer Trapping Survey (continued).

### PART C - FURBEARER POPULATIONS

6. Compared to 1995-96 (last season), were the populations of the following furbearers up, unchanged, or down during 1996-97 (this season)? (Express your opinion by circling the appropriate number for each species)

Species	Up	Unchanged	Down	Don't Know
Muskrat .....	1 .....	2 .....	3 .....	4 .....
Raccoon .....	1 .....	2 .....	3 .....	4 .....
Red fox .....	1 .....	2 .....	3 .....	4 .....
Beaver .....	1 .....	2 .....	3 .....	4 .....
Coyote .....	1 .....	2 .....	3 .....	4 .....

7. Have you seen a river otter or observed river otter sign in Illinois during the past three years?

Yes ... 1                      No ... 2                      If yes, list county: \_\_\_\_\_

8. Have you seen a bobcat or observed bobcat sign in Illinois during the past three years?

Yes ... 1                      No ... 2                      If yes, list county: \_\_\_\_\_

### PART D - FURBEARER HUNTING

9. Did you also HUNT furbearers with a gun and/or dogs during the 1996-97 season?

Yes ... 1                      No ... 2

If yes, please give the number of each kind taken:

\_\_\_\_\_ Raccoon    \_\_\_\_\_ Red Fox    \_\_\_\_\_ Skunk  
 \_\_\_\_\_ Opossum    \_\_\_\_\_ Gray Fox    \_\_\_\_\_ Coyote

### PART E - OTHER TOPICS

10. Did you trap for MINK during the 1996-97 season?

Yes ... 1                      No ... 2

If YES, continue with question #11. If NO, stop here and return the questionnaire.

11. Please indicate the types and numbers of traps you actually set for MINK during the 1996-97 season. Fill in all blanks that apply.

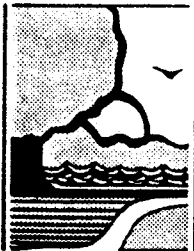
<u>Trap type</u>	<u>Maximum number set at any time</u>
Standard foothold (leghold) traps	_____ traps
Body-gripping (Conibear) traps	_____ traps
Box or cage traps	_____ traps
Snares	_____ traps
Other (list) _____	_____ traps
_____	_____ traps

If you used foothold (leghold) traps for MINK during the 1996-97 season, continue with question # 12. If you did not use foothold (leghold) traps for MINK, stop here and return the questionnaire.

12. Please indicate the PERCENTAGE of your 1996-97 MINK catch taken with FOOTHOLD (LEGHOLD) traps that was caught in each type of set listed below. Fill in all blanks that apply.

<u>Set type</u>	<u>Percentage of MINK caught in FOOTHOLD traps in this type of set</u>
Dry land set made specifically to catch mink .....	_____ %
Dry land set made for multiple species (not just mink) .....	_____ %
Water set made specifically to catch mink .....	_____ %
Water set made for multiple species (not just mink) .....	_____ %
Other .....	_____ %
Don't know .....	_____ %
Total .....	<u>100</u> %

**THANKS FOR YOUR COOPERATION!!!**  
**POSTAGE IS PREPAID**



ILLINOIS  
DEPARTMENT OF  
**NATURAL RESOURCES**

524 South Second Street, Springfield 62701-1787

Jim Edgar, Governor ● Brent Manning, Director

March 1997

Dear Illinois Trapper:

The Department of Natural Resources conducts an annual survey of trappers to collect information about harvests, trapping success, and trapping pressure. We also ask for your opinions about furbearer populations in your area.

Results of the survey allow us to estimate the number of pelts taken by trappers, value of pelts taken by trappers, and distribution of harvest pressure. Estimates of trapping success, your opinions about furbearer populations, and observations of closed-season furbearers are used with other sources of information to track changes in furbearer numbers.

You can make an important contribution to management of Illinois' fur resources by completing the enclosed questionnaire. The questionnaire is short and self-explanatory. Your participation is important because you are part of a small, random sample of people who purchased a 1996-97 trapping license. **Please reply even if you did not trap this season or were not successful.**

If you do not remember exact figures, please give your best estimate. Also, if you trapped in partnership with another person, list only your half of the catch. Drop the completed questionnaire in the mail; no postage is required.

Thank you for participating in Illinois' furbearer management program. If you have comments on topics that are not addressed by this questionnaire, please write them on a separate sheet of paper to receive proper attention.

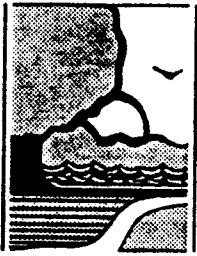
Sincerely,

Bob Bluett  
Furbearer Program Manager

BB:bb

Figure 4. The letter that accompanied the first mailing of the questionnaire.

[printed on recycled and recyclable paper]



ILLINOIS  
DEPARTMENT OF  
**NATURAL RESOURCES**

524 South Second Street, Springfield 62701-1787

Jim Edgar, Governor ● Brent Manning, Director

April 1997

Dear Illinois Trapper:

We recently mailed you a Trapper Harvest Survey questionnaire and requested that you fill out and return the completed form. We have not received your form at this time - perhaps because you have misplaced the questionnaire or haven't found the time to complete it and return it to us.

We are enclosing another questionnaire which we hope you will complete and return to us as soon as possible. If you have already returned the questionnaire, please destroy this one. The information supplied by you and other trappers being sampled will be of great value to the Department of Natural Resources in better directing the management of Illinois' fur resources.

Please fill out the questionnaire and return it **even if you did not trap or were not successful**. If you trapped in partnership with another person, please list only your half of the catch. No postage is required to return the completed questionnaire. Simply fill it out and drop it in the mail.

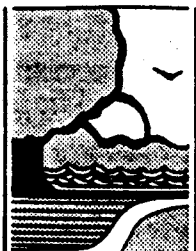
Your prompt attention will be greatly appreciated. Thank you for your help.

Sincerely,

Bob Bluett  
Furbearer Program Manager

BB:bb

Figure 5. The letter that accompanied the second mailing of the questionnaire.



ILLINOIS  
DEPARTMENT OF  
**NATURAL RESOURCES**

524 South Second Street, Springfield 62701-1787

Jim Edgar, Governor ● Brent Manning, Director

May 1997

Dear Illinois Trapper:

This is to remind you that we would still like to receive your completed questionnaire regarding your trapping activities this past season. We don't like to keep bothering you, but this is very important information which only you can supply.

Another copy of the questionnaire is enclosed. We hope that you will complete and return it as soon as possible. If you have already returned a questionnaire, simply destroy this one.

We are making a final effort to obtain your responses so that we may compile the information received from all cooperating trappers and prepare a report of our findings. Remember, your response is needed, even if you did not trap or had an unsuccessful season. Results of the survey allow us to estimate the number of pelts taken by trappers, value of pelts taken by trappers, and distribution of harvest pressure. Estimates of trapping success, your opinions about furbearer populations, and observations of closed-season furbearers are used with other sources of information to track changes in furbearer numbers.

No postage is required to return the questionnaire. Just fill it out and drop it in the mail. Please help us complete this survey by sending your responses now.

Sincerely,

Bob Bluett  
Furbearer Program Manager

BB:bb

Enc.

Figure 6. The letter that accompanied the third mailing of the questionnaire.

[printed on recycled and recyclable paper]



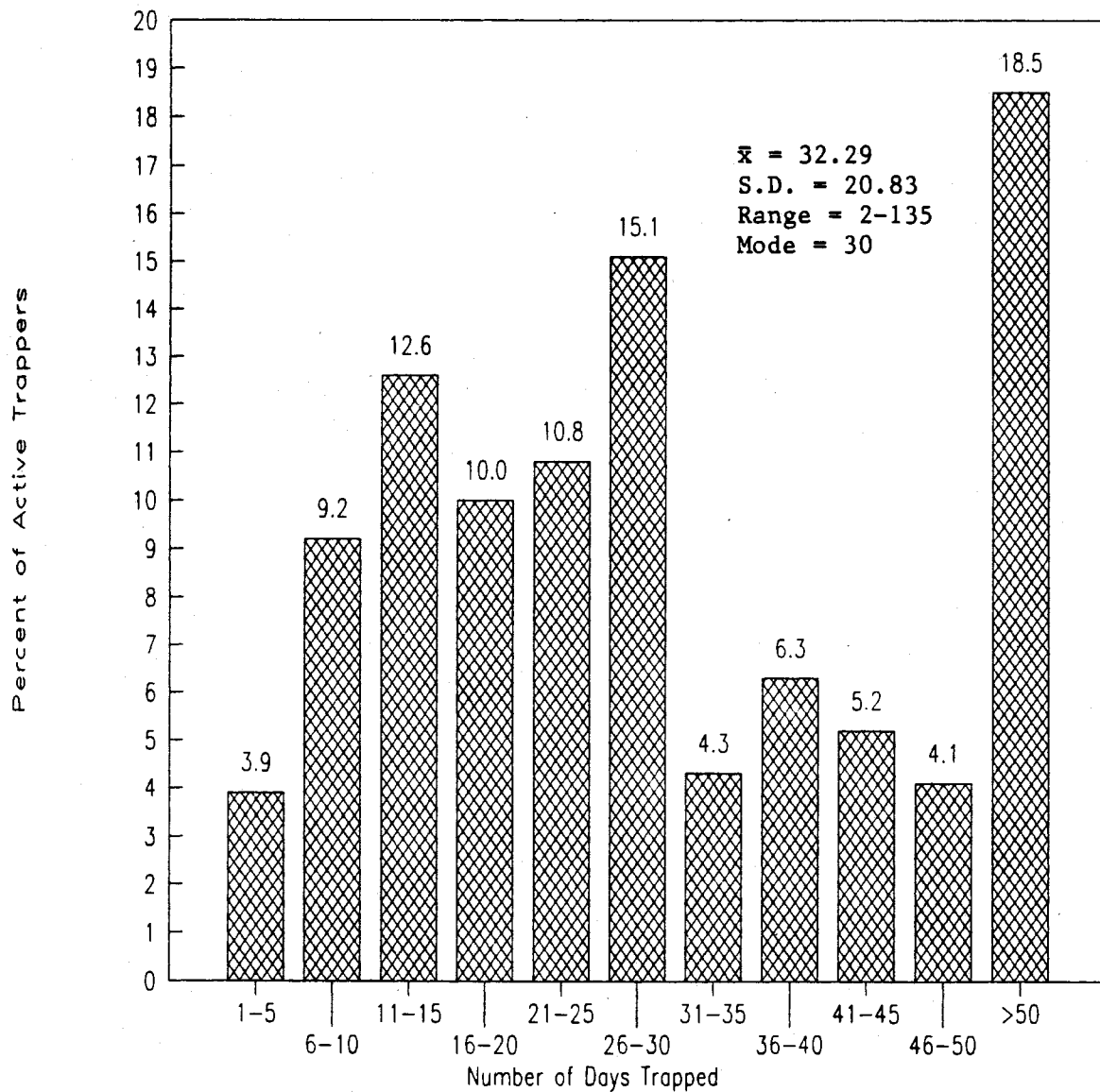


Figure 8. Distribution of days of trapping by active trappers in Illinois, 1996-97 season (n=557).



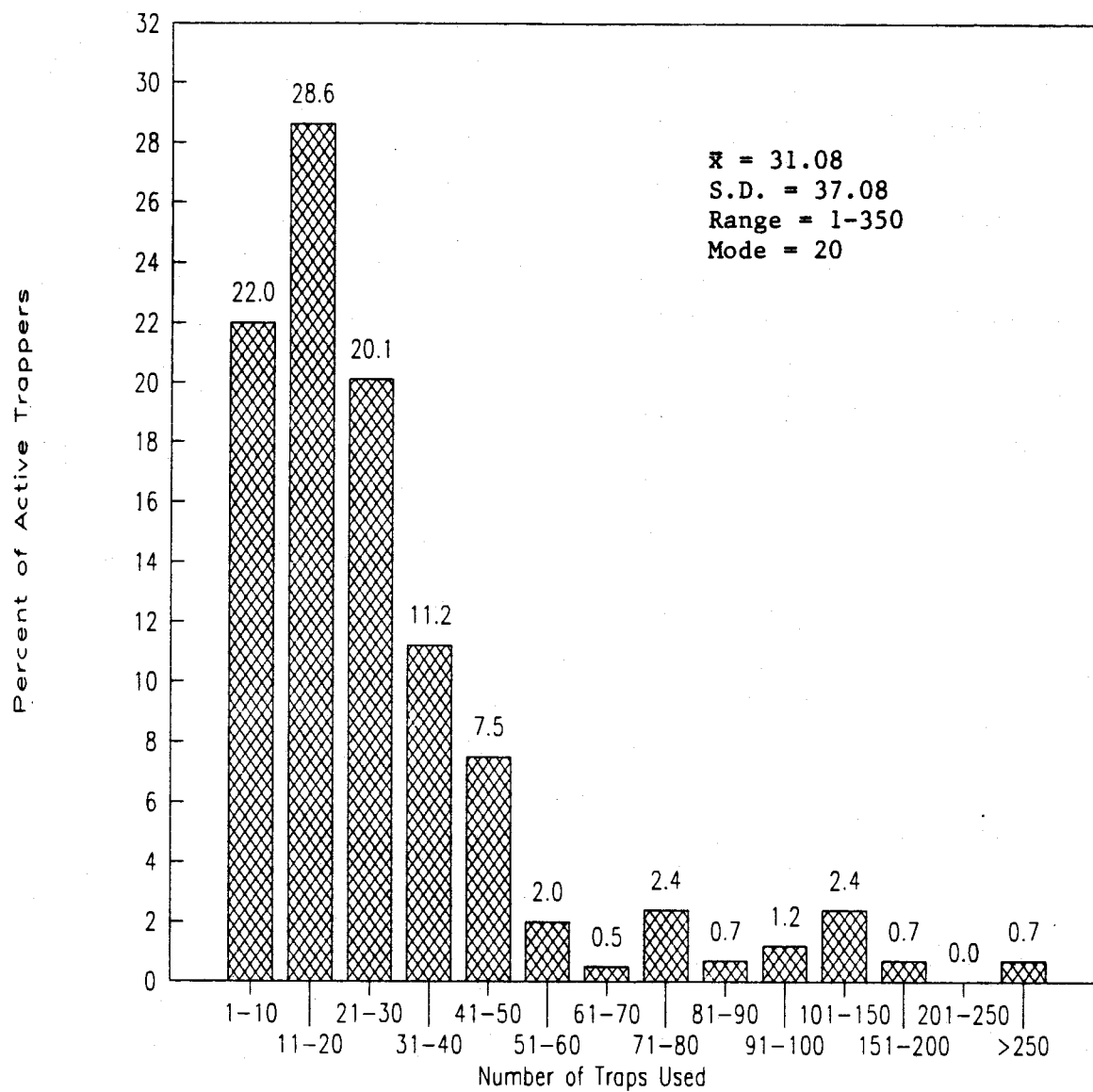


Figure 9. Distribution of the number of traps used by active trappers in Illinois, 1996-97 season (n=559).

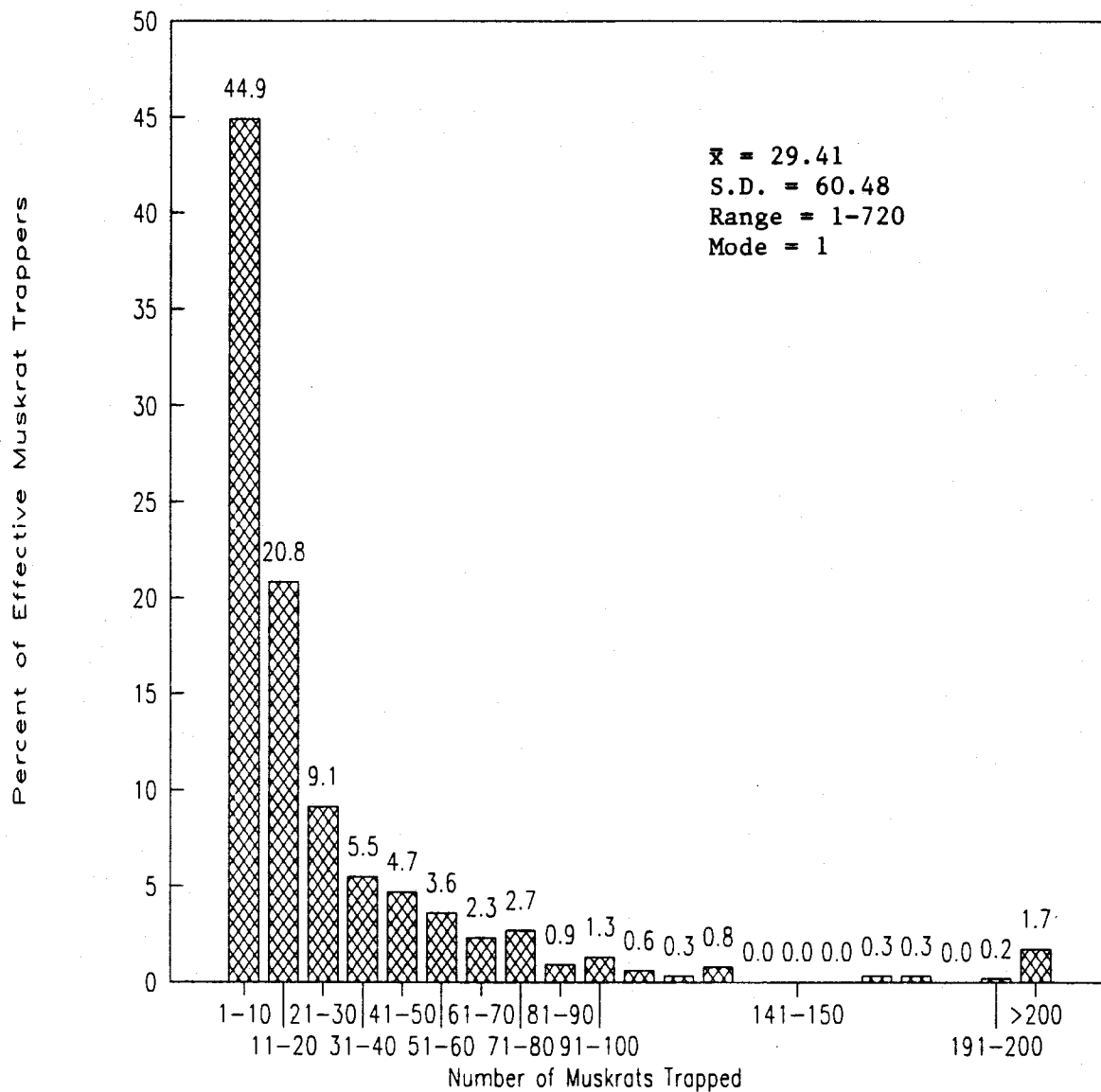


Figure 10. Distribution of the number of muskrats trapped per effective muskrat trapper in Illinois, 1996-97 season (n=361).

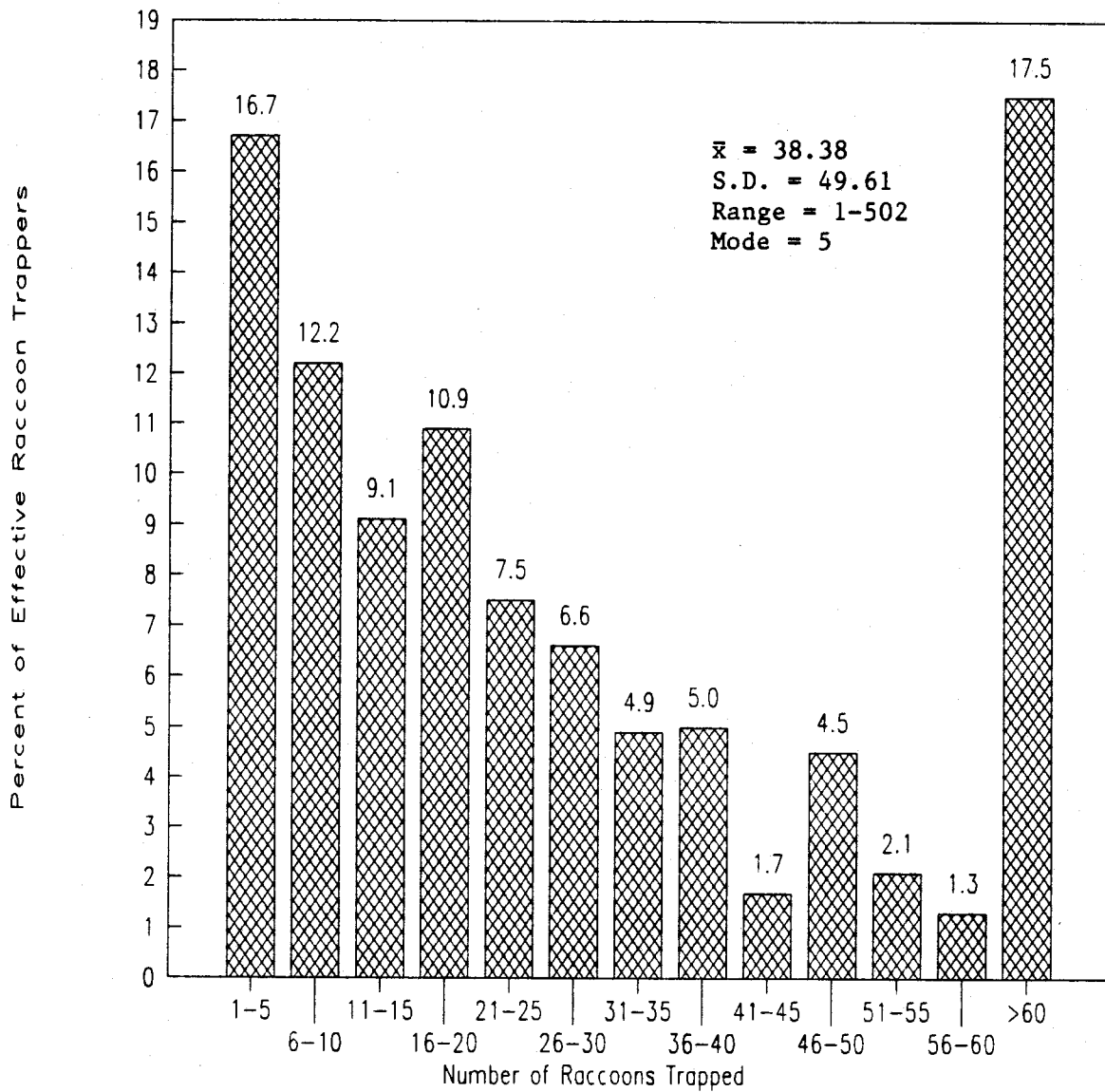


Figure 11. Distribution of the number of raccoons trapped per effective raccoon trapper in Illinois, 1996-97 season (n=532).

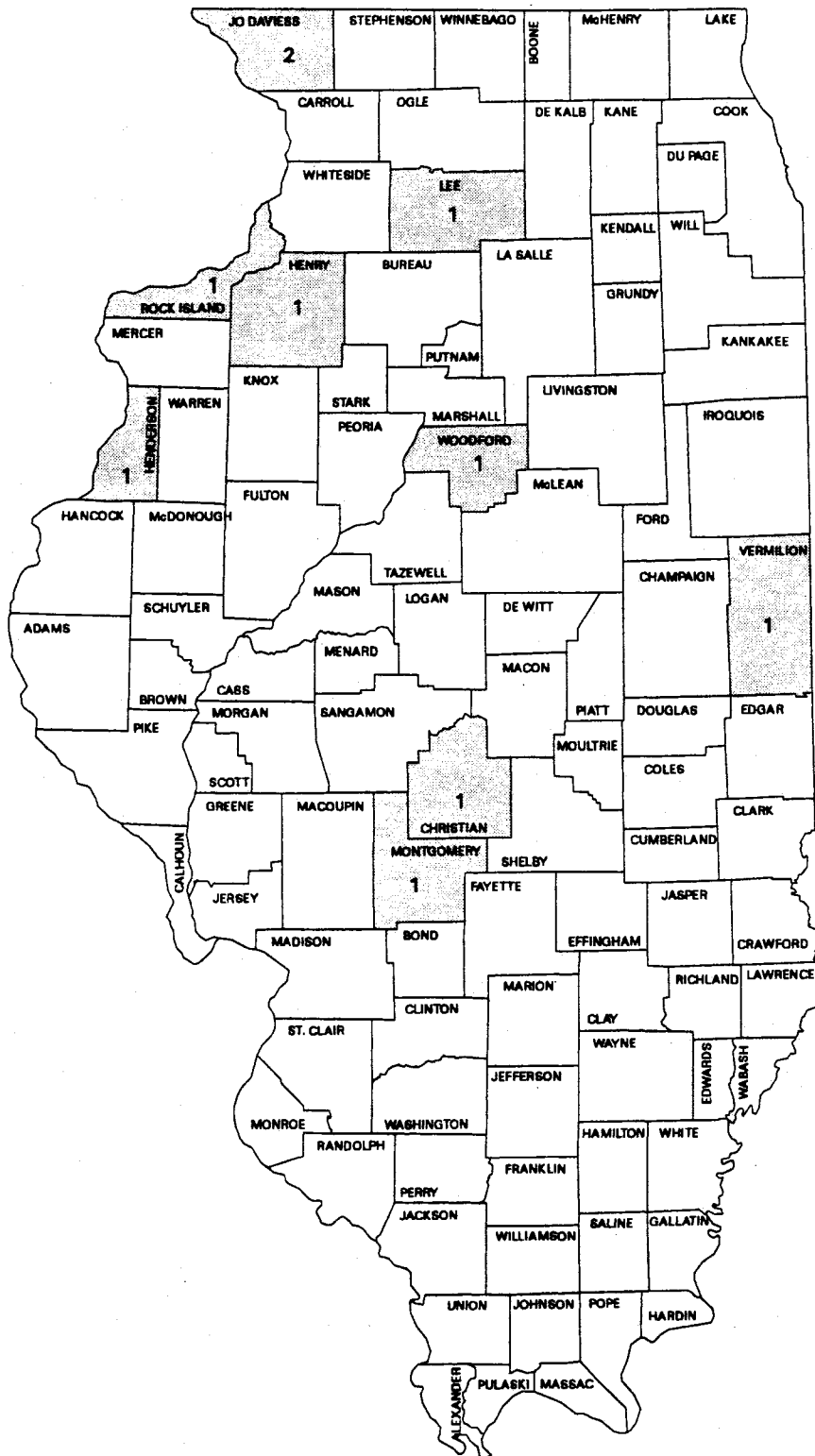


Figure 12. Illinois counties in which trappers reported catching badgers in 1996-97. The number of reports is listed for each county.

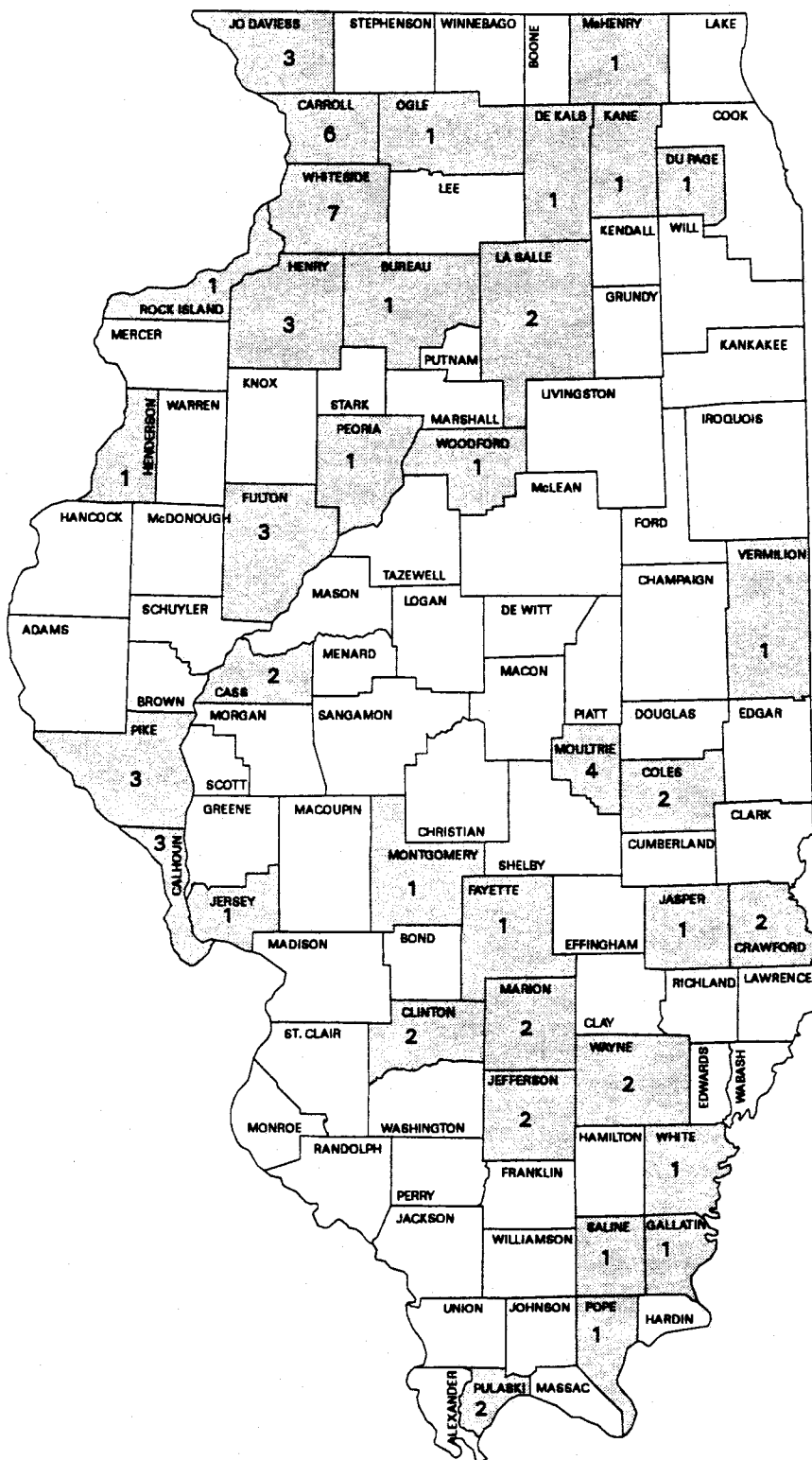


Figure 13. Illinois counties in which trappers reported observing river otters or their sign during the past three years (1994-95, 1995-96, and 1996-97 seasons). The number of reports is listed for each county.

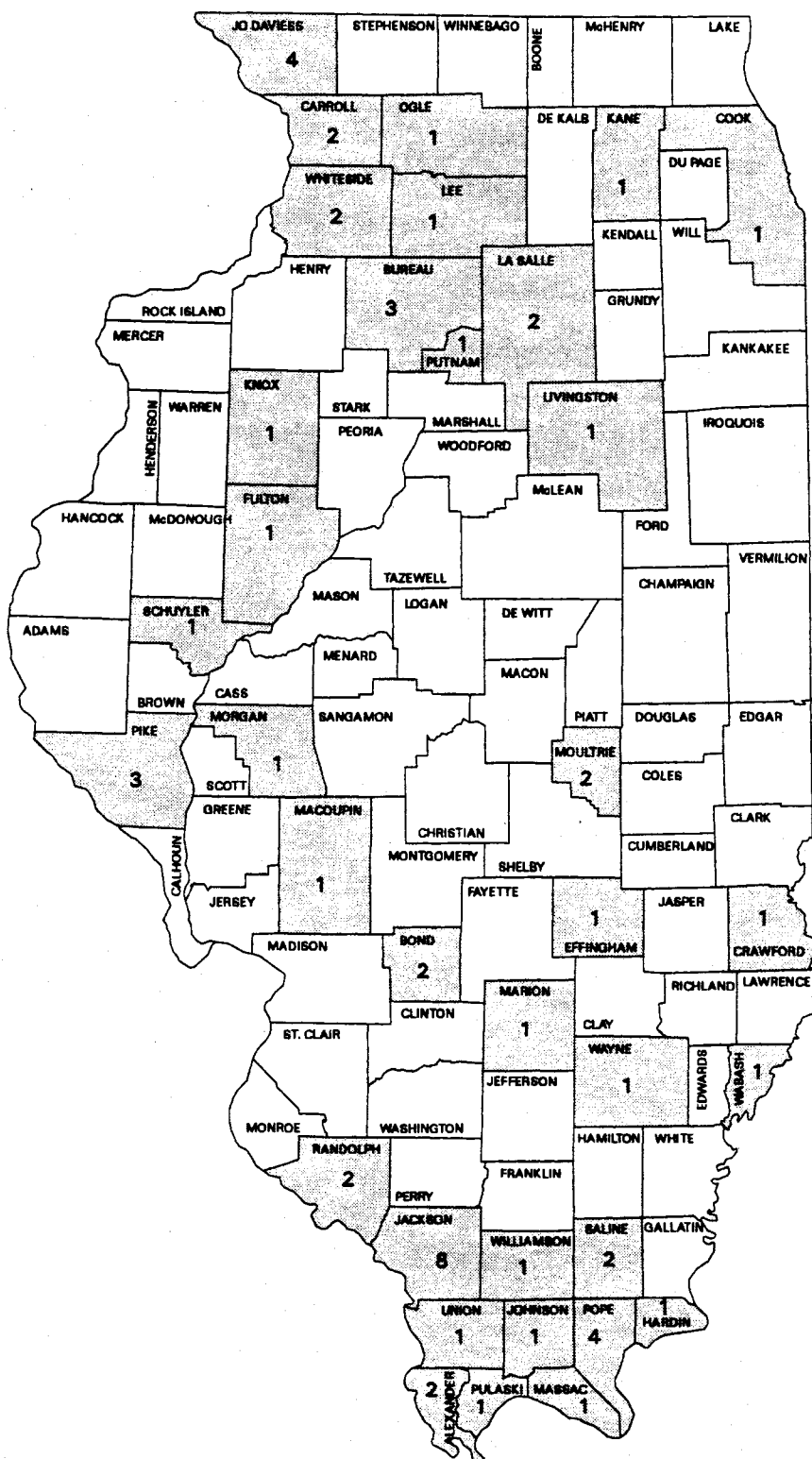


Figure 14. Illinois counties in which trappers reported observing bobcats or their sign during the past three years (1994-95, 1995-96, and 1996-97 seasons). The number of reports is listed for each county.



